

ABSTRACT OF THE DISCLOSURE

A device for ion charging airborne toner particles for the development of electrophotographic images is proposed. The ion toner-charging device subjects an airborne stream of toner particles to unipolar gas ions in the presence of an applied alternating electric field. The alternating electric field prevents the charged particles from depositing on the electrodes in the charging zone. The device uniformly charges irregular or spherical shaped toner particles to the Pauthenier charging limit. The device is an interface between various methods for supplying toner to the unit and developing an electrostatic image with ion charged toner.